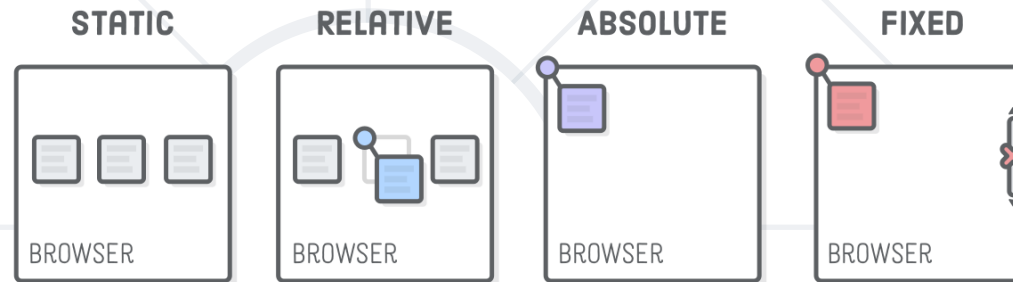


# POSITION & FLOAT



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3. Position: static, relative, absolute, fixed and sticky
4. Positioning Properties
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sli.do

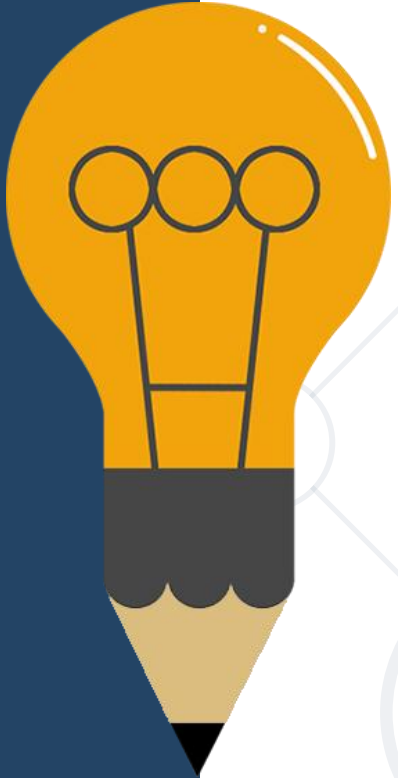
**#HTML-CSS**



# Float Property

# What is Float?

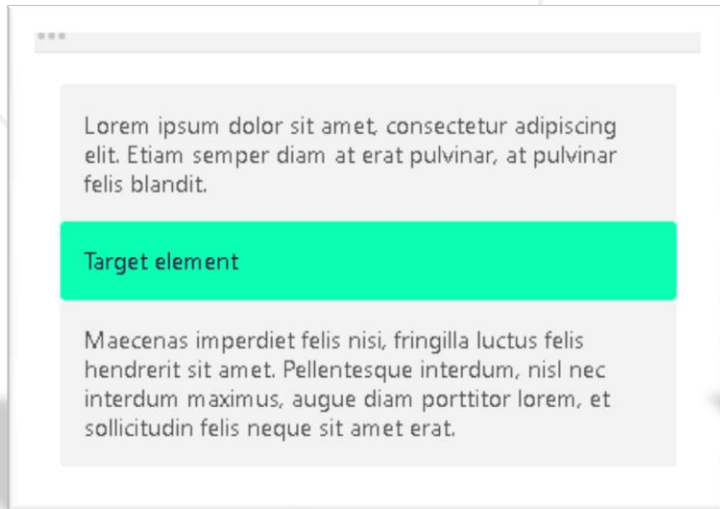
- CSS float is a property that forces any element to float (right, left, none, inherit) inside its parent body with the rest of the element to wrap around it
- The element is removed from the normal flow of the page, though still remaining a part of the flow



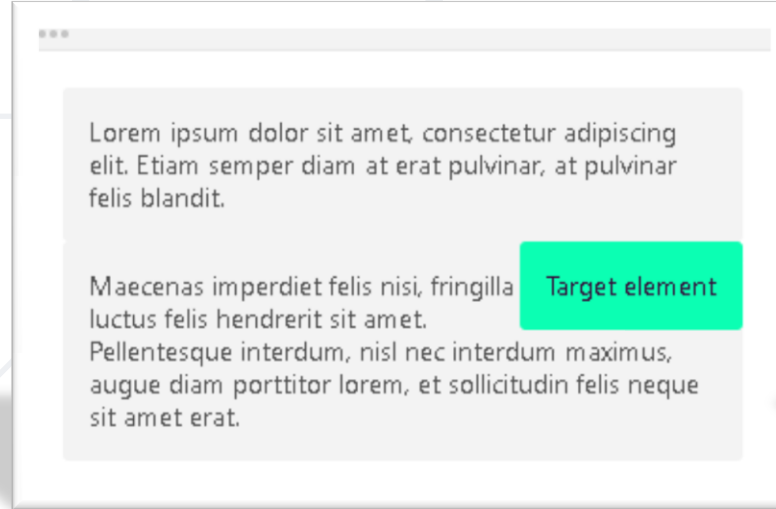
- Float values:
  - float : **right**; - floats the element to right of it's container
  - float : **left**; - floats the element to left of it's container
  - float : **none**; - it will restrict the element to float
  - float : **initial**; - the element remains to it's default position
  - float : **inherit**; - enables the element to inherit the property from its parent element

# Float Property - Example

## ■ float: none;



## ■ float: right;



## ■ float: left;



# Floating multiple Elements

```
<body>  
    
    
    
    
</body>
```

```
.image {  
  float: left;  
  width: 150px;  
  height: 100px;  
  margin: 5px;  
}
```





- As float implies the use of the block layout, it modifies the computed value of the display values, in some cases:

Specified value → Computed value

inline → block

inline-block → block

# Clearing the Float

- Float's sister property is **clear**
- An element that has the clear property set on it will not move up adjacent to the float like the float desires but will move itself down past the float

General **rule** for dealing with Float  
When you add float, always make sure that it  
is **cleared** properly. At the time of adding it.

Main Content  
*(float left)*

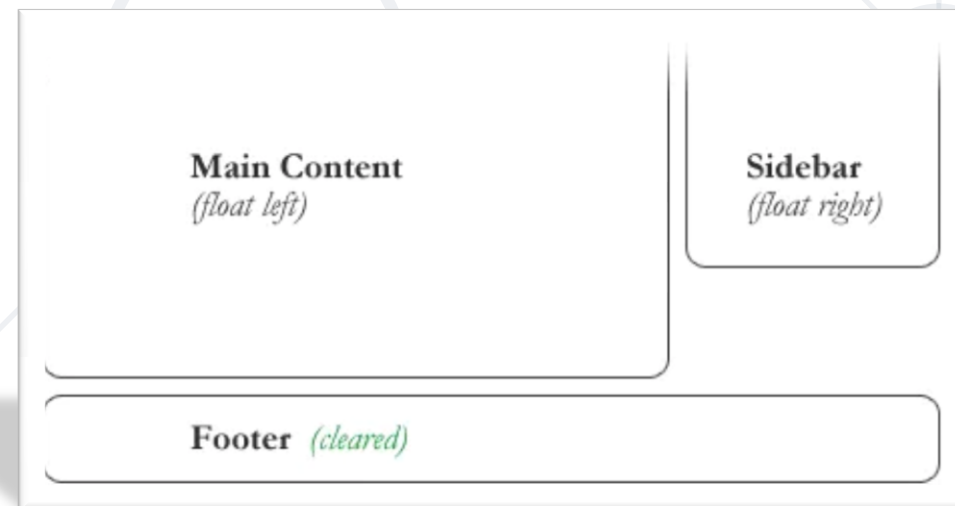
Sidebar  
*(float right)*

Footer *(not cleared!)*

# Clearing the Float

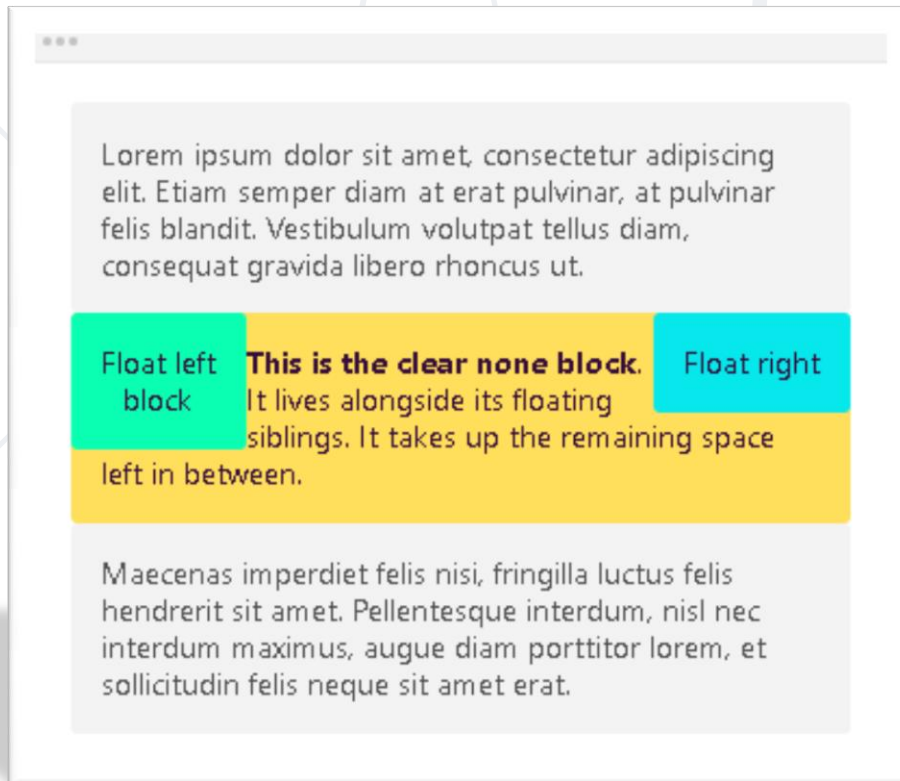
- In the above example, the **sidebar** is **floated** to the **right** and is shorter than the main content area
- The footer then is required to jump up into that available space as is required by the float
- To fix this problem, the **footer** can be **cleared** to ensure it stays beneath both floated columns

```
#footer {  
  clear: both;  
}
```



- The clear property has four values:

- clear: none;



- clear: left;

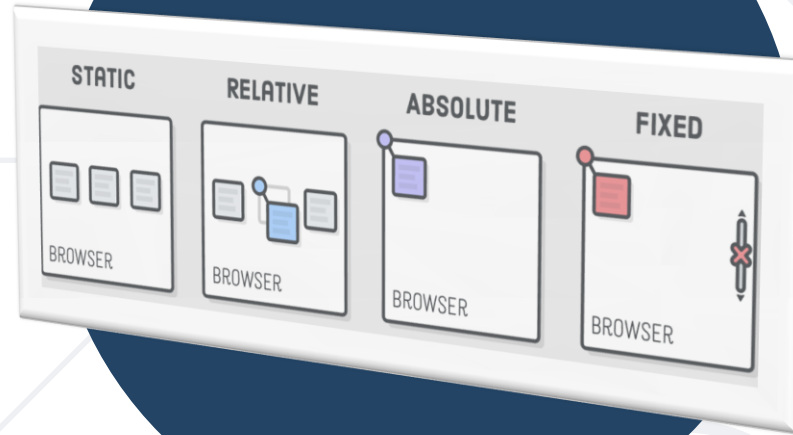


- `clear: right;`

The diagram shows a browser window with a light gray background. At the top, there is a paragraph of Lorem ipsum text. Below this, there are two floating elements: a tall cyan block on the left labeled 'Tall float left block' and a smaller cyan block on the right labeled 'Float right'. Below these floats is a yellow rectangular block containing the text: 'This is the clear left element. It comes after the clear right, but remains alongside the float left.' At the bottom of the window is another paragraph of Lorem ipsum text.

- `clear: both;`

The diagram shows a browser window with a light gray background. At the top, there is a paragraph of Lorem ipsum text. Below this, there are two floating elements: a cyan block on the left labeled 'Float left' and a smaller cyan block on the right labeled 'Float right'. Below these floats is a yellow rectangular block containing the text: 'This is the clear both element. It comes after both floating elements.' At the bottom of the window is another paragraph of Lorem ipsum text.



# Position

- The **position** property specifies the type of positioning method used for an element
  - Static
  - Relative
  - Absolute
  - Fixed
  - Sticky

- Static – the **default** state of every element. It just means "put the element into its **normal position** in the document layout flow"
- Also, it will **not** react to the following properties: top, bottom, left, right, z-index

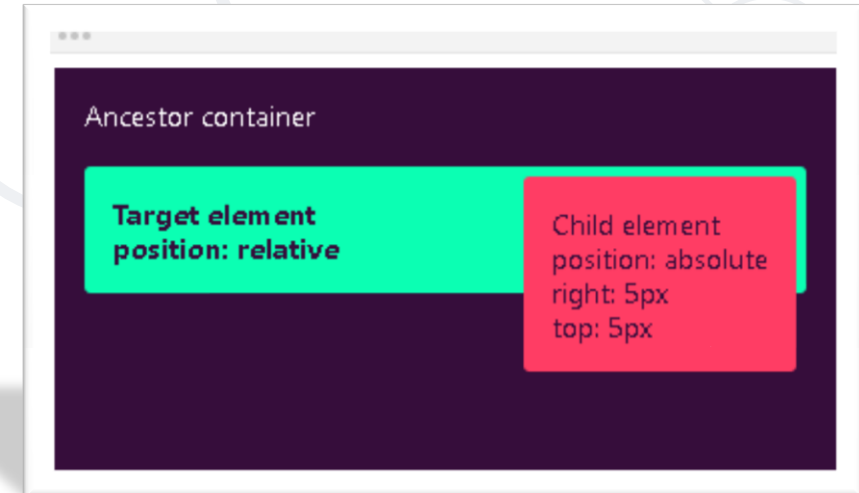
```
[selector] {  
  position: static;  
}
```





- Relative – very similar to static positioning, **except** that once the positioned element has taken its place, you can then modify its final position with the **positional properties** – left, right, top, bottom, z-index
- It also makes the element **positioned**: it will act as **anchor** point for the absolutely positioned block

```
[selector] {  
  position: relative;  
}
```



- Absolute – the element will **not remain** in the natural flow of the page. It will **react** to the positional properties
- It will position itself according to the closest positioned ancestor
- Because it's positioned, it will act as an anchor point for the absolutely positioned block

```
[selector] {  
  position: absolute;  
}
```



- Fixed – the element will **not remain** in the natural flow of the page. It will **react** to the positional properties
- It will position itself according to the **viewport**
- Because it's positioned, it will act as an **anchor point** for the absolutely positioned block

```
[selector] {  
  position: fixed;  
}
```



- Sticky – the element is positioned based on the user's **scroll position**
- A sticky element toggles between **relative** and **fixed**, depending on the scroll position
- It is positioned relative until a given offset position is met in the viewport – then it "sticks" in place (like `position: fixed`)

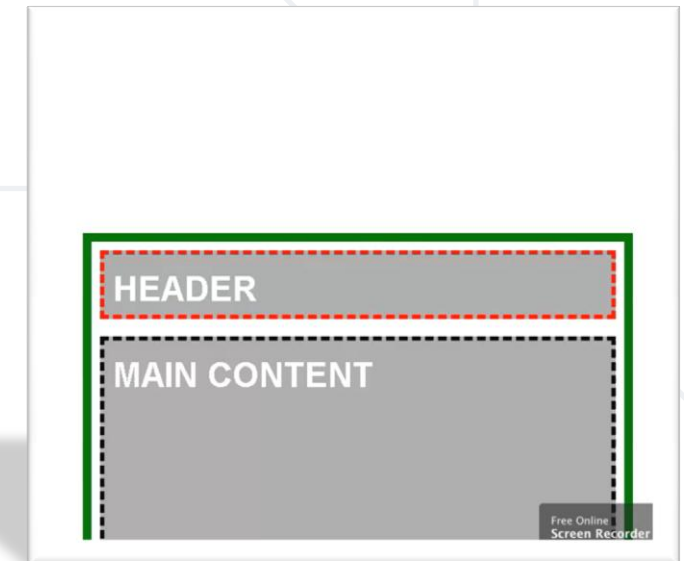
# Position Sticky - Example

```
.main-container {  
  max-width: 600px;  
  margin: 0 auto;  
  border: 10px solid green;  
  padding: 10px;  
  margin-top: 40px;  
}
```

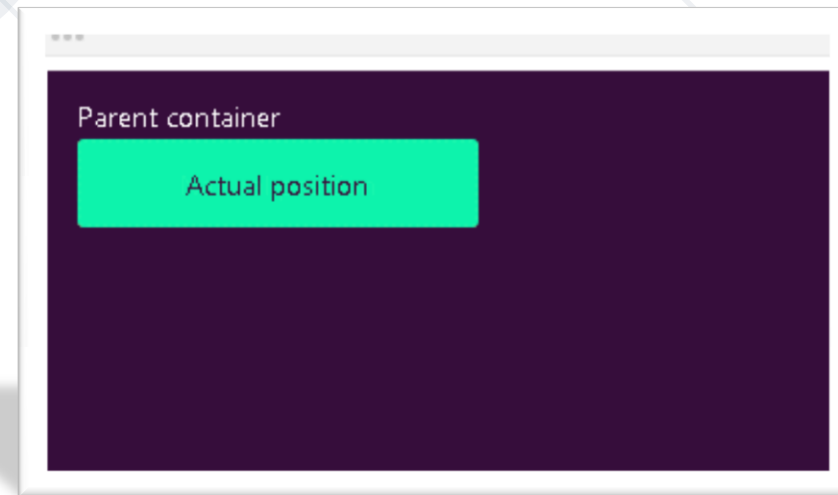
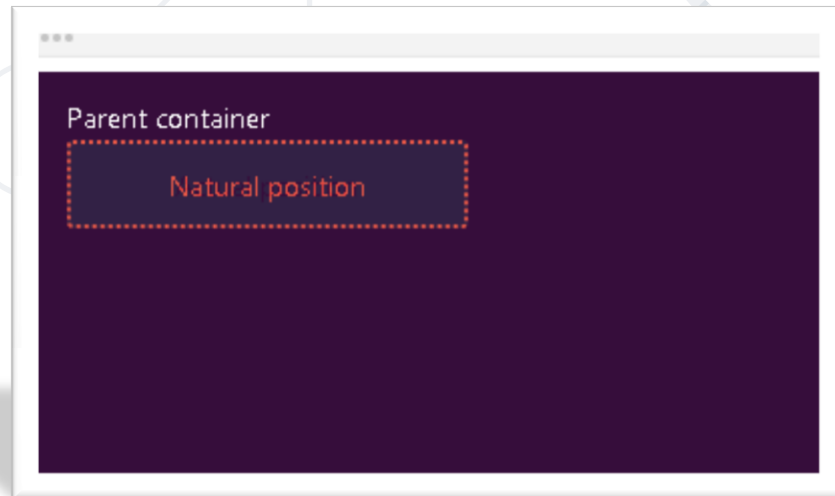
```
.main-header,  
.main-content,  
.main-footer {  
  padding: 10px;  
  background: #aaa;  
  border: 5px dashed #000;  
  margin: 20px 0;  
}
```

```
<main class="main-container">  
  <header class="main-header">HEADER</header>  
  <div class="main-content">MAIN CONTENT</div>  
  <footer class="main-footer">FOOTER</footer>  
</main>
```

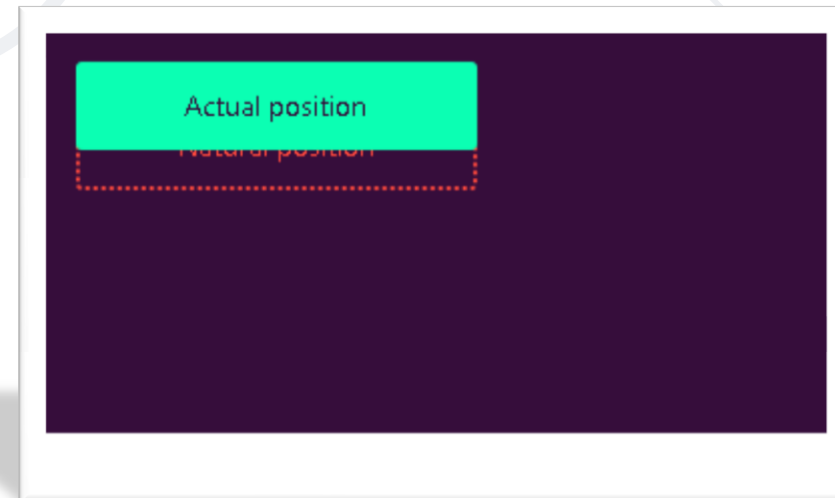
```
.main-content {  
  min-height: 1000px;  
}  
.main-header {  
  height: 50px;  
  border-color: red;  
  position: sticky;  
  top: 0;  
}
```



- Bottom – defines the position of the element according to its **bottom** edge
  - bottom: auto; - the element will remain in its **natural** position



- `bottom: 20px;`
- If the element is in position **relative**, the element will move *upwards* by the amount defined by the **bottom** value

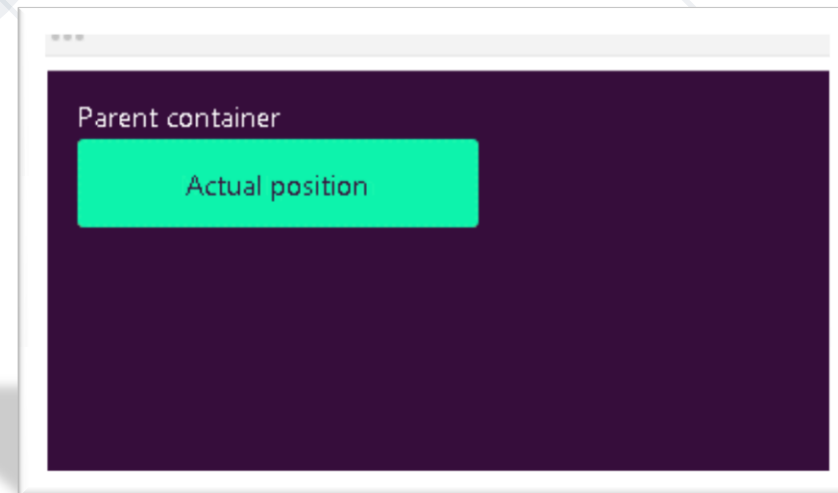
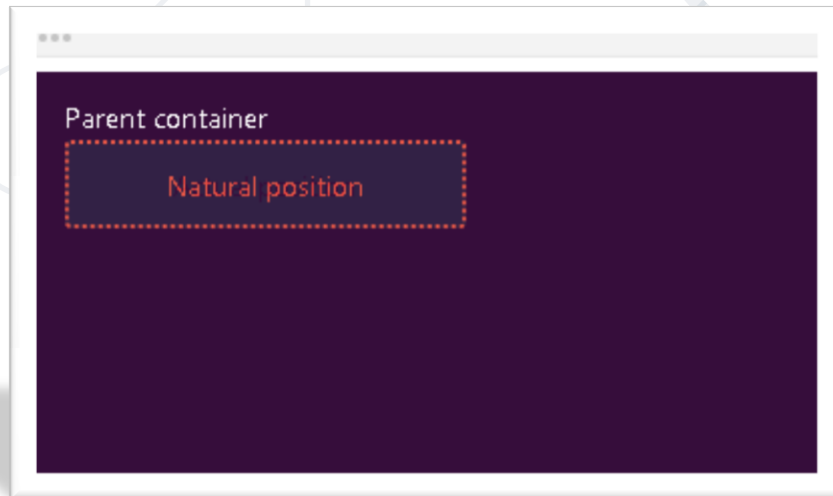


- `bottom: 0;`
- If the element is in position **absolute**, the element will position itself from the *bottom* of the first positioned **ancestor**

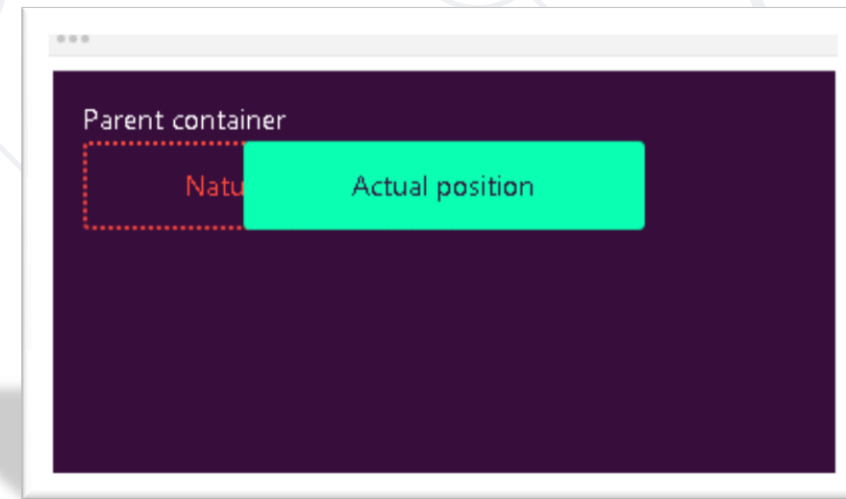
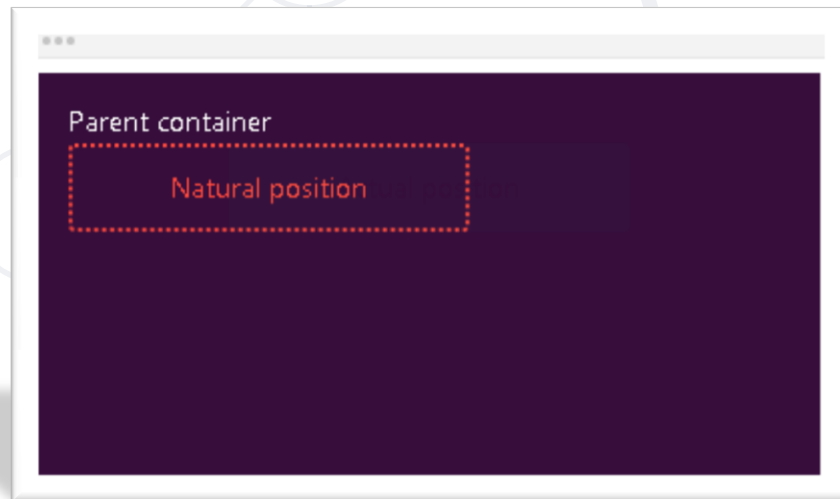




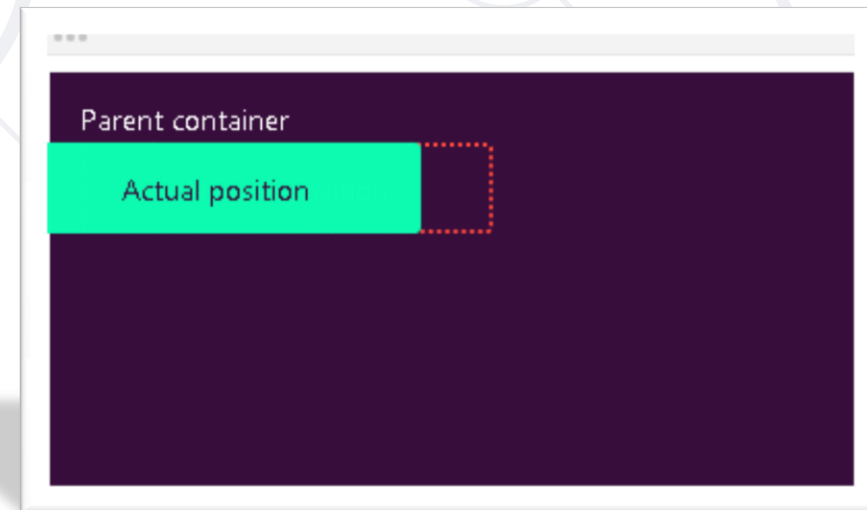
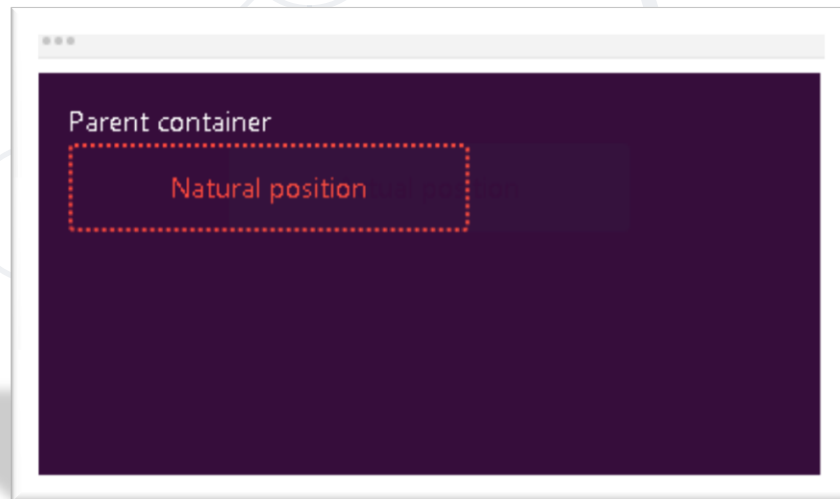
- Left – defines the position of the element according to its **left** edge
  - left: auto; - the element will remain in its **natural** position



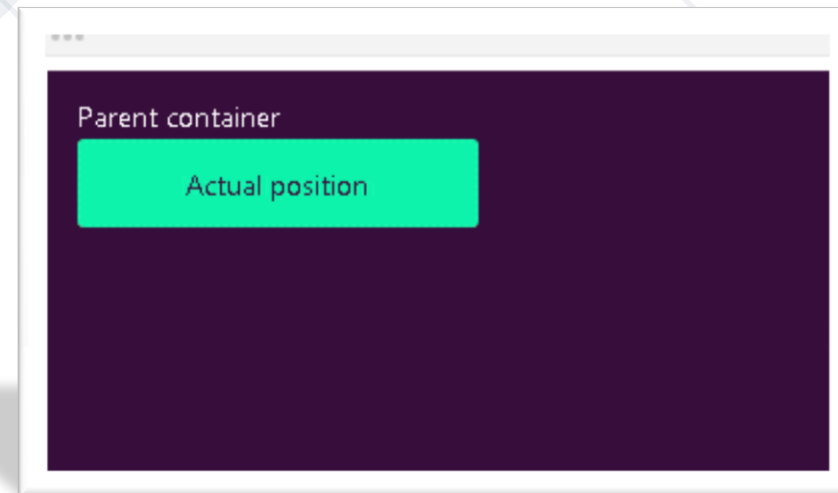
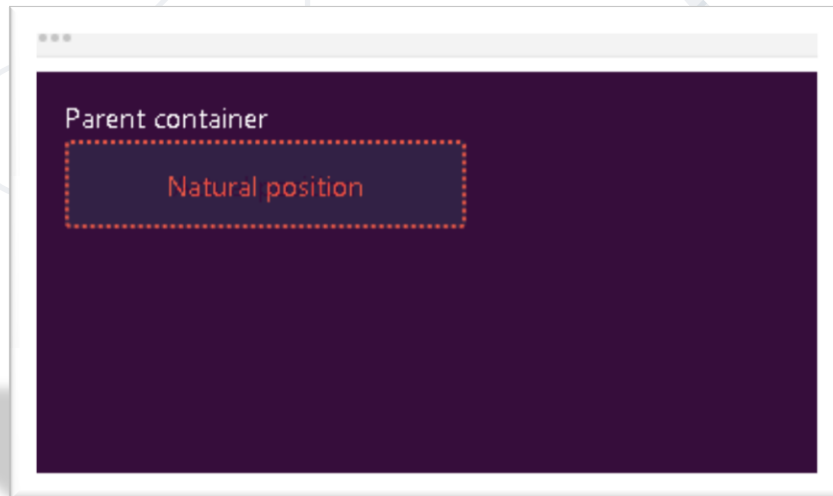
- `left: 80px;` - if the element is in position **relative**, the element will move *left* by the amount defined by the **left** value



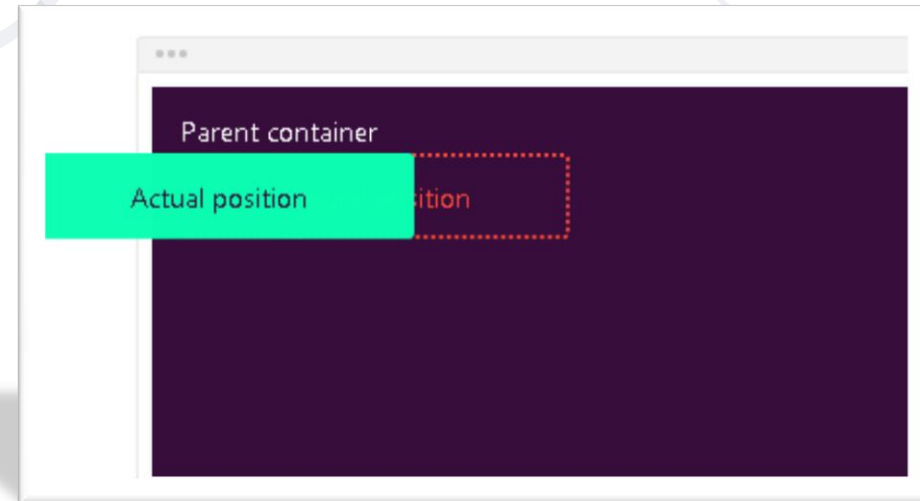
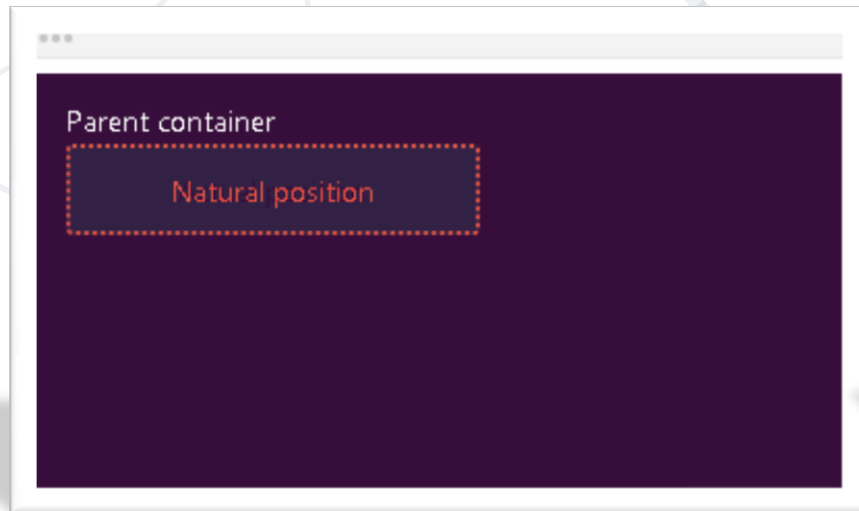
- `left: -20px;` - if the element is in position **absolute**, the element will position itself from the *left* of the first positioned **ancestor**



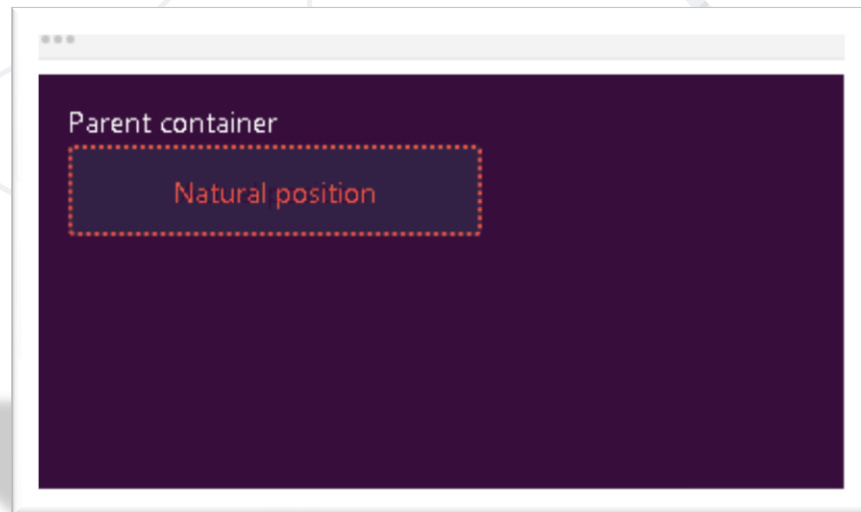
- Right – defines the position of the element according to its **right** edge
  - `right: auto;` - the element will remain in its **natural** position



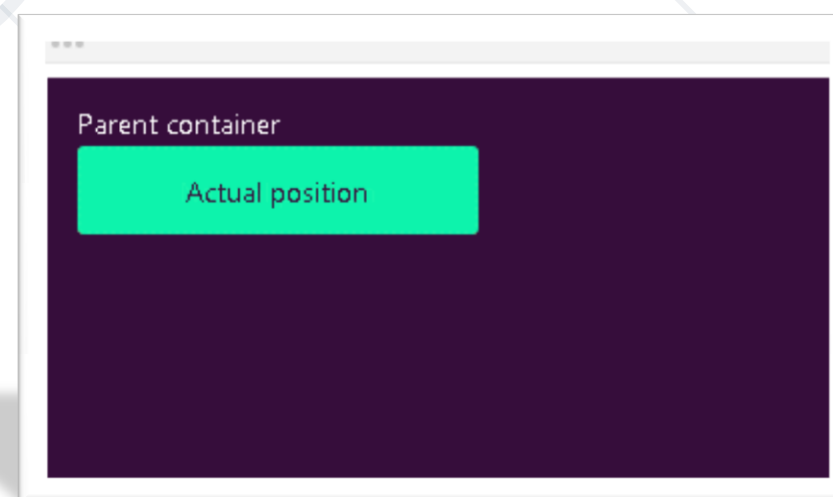
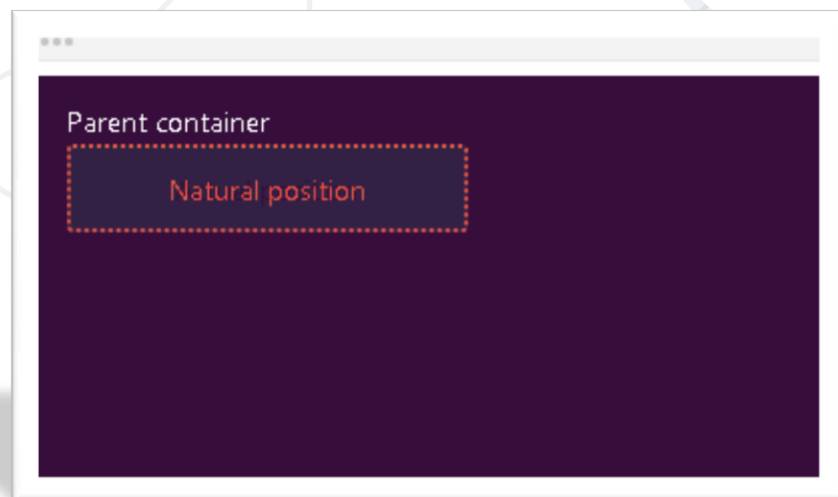
- `right: 80px;` - if the element is in position **relative**, the element will move *right* by the amount defined by the **right** value



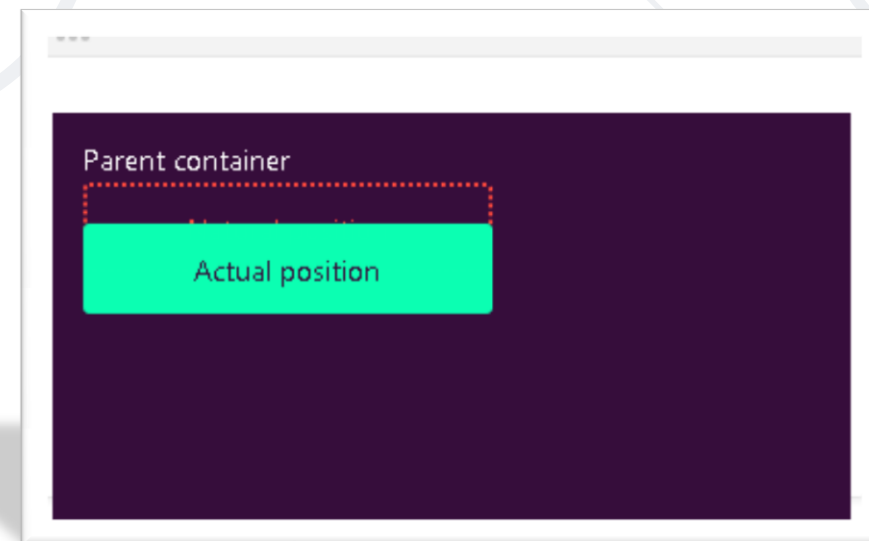
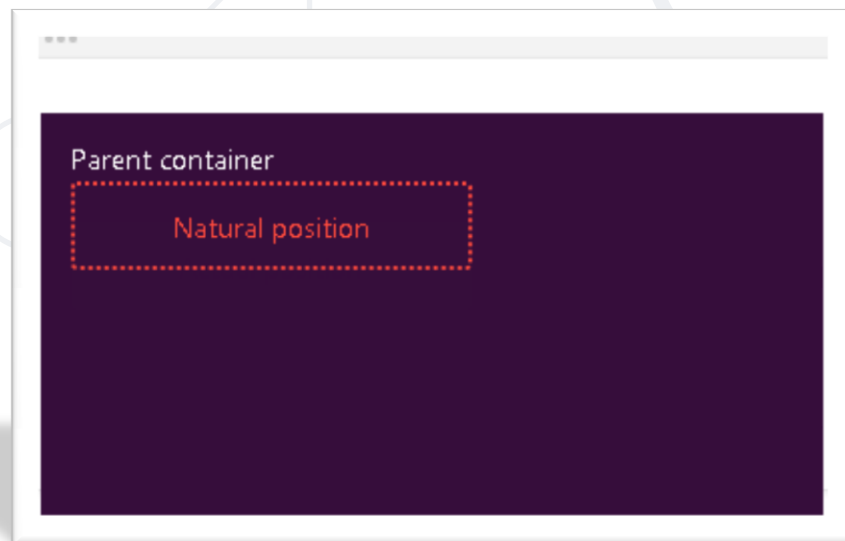
- `right: -20px;` - If the element is in position **absolute**, the element will position itself from the *right* of the first positioned **ancestor**



- Top – defines the position of the element according to its **top** edge
  - `top: auto;` - the element will remain in its **natural** position

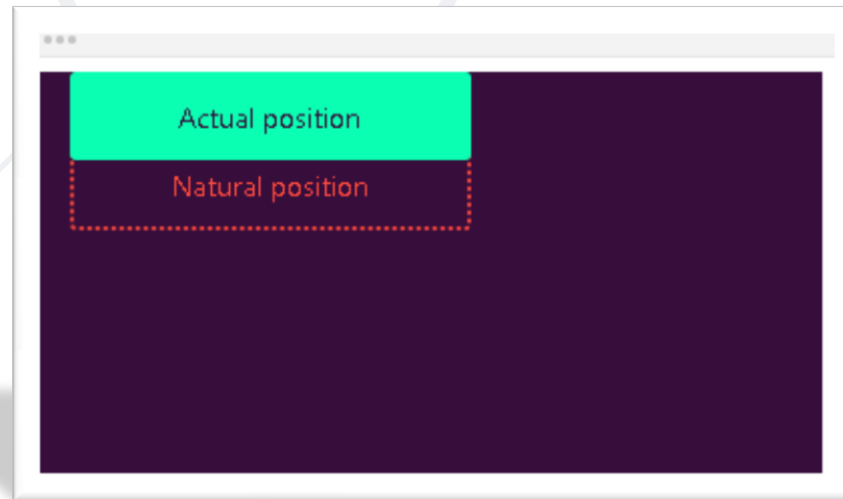


- `top: 20px;` - If the element is in position **relative**, the element will move *downwards* by the amount defined by the **top** value





- `top: 0;` - If the element is in position **absolute**, the element will position itself from the *top* of the first positioned **ancestor**



- Defines the order of the elements on the **z-axis**. It only works on positioned elements (anything apart from static)
  - **z-index: auto;**
  - The order is defined by the order in the HTML code:
    - First in the code = behind
    - Last in the code = in front



- **z-index: 1;**
- The z-index value is relative to the other ones. The target element is move in **front** of its siblings



- **z-index: -1;**
- You can use negative values. The target element is move in behind its siblings



- What is a float?
- How to float elements?
- How to clear float?
- Positioning properties
- How to work with z-index?



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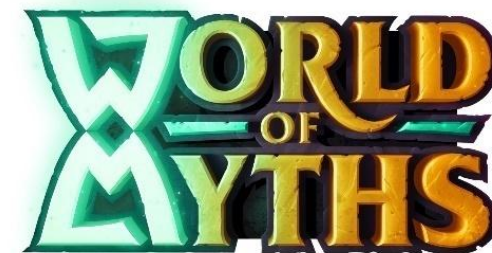
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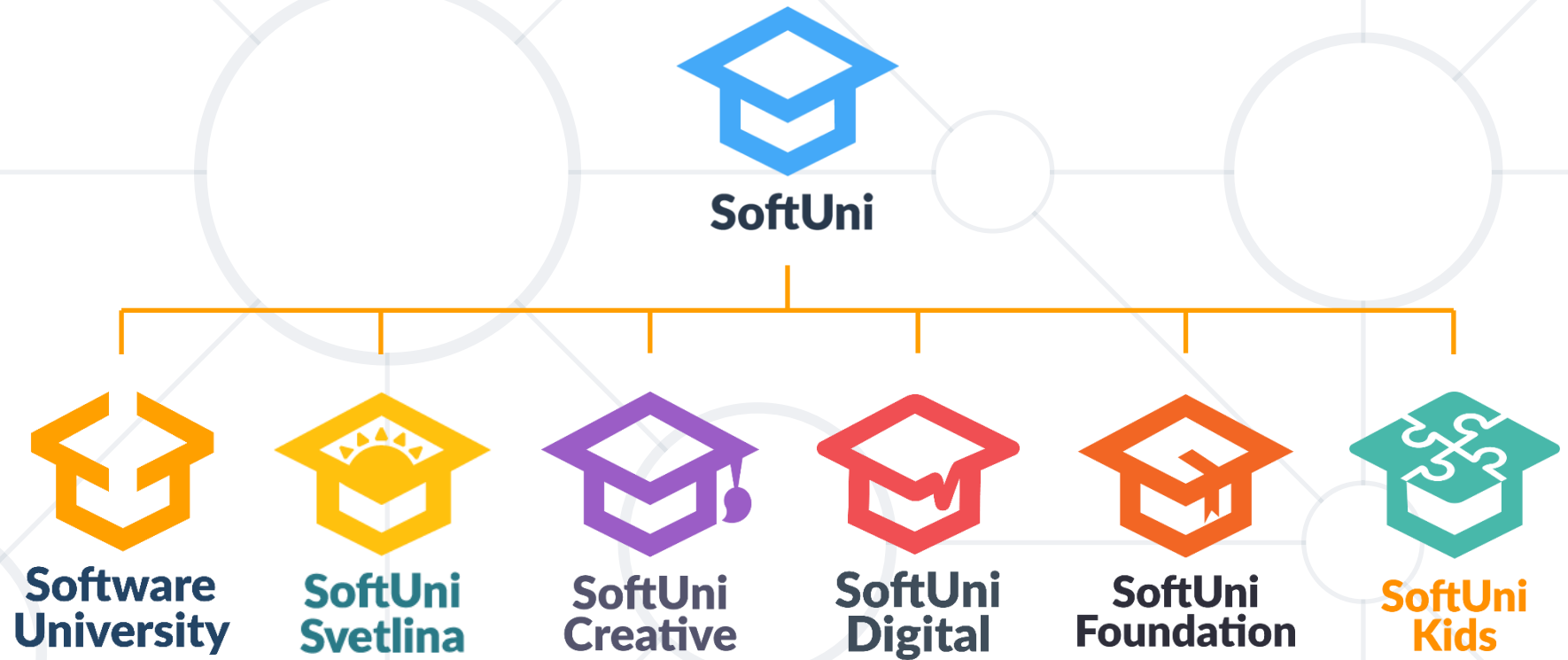
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